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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,921	11/30/2000	Michael M. Gawargy	9-13528-112US KD/bm	9761
20988	7590	09/29/2004	EXAMINER	
OGILVY RENAULT 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA			PHAN, MAN U	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/725,921

Applicant(s)

GAWARGY ET AL.

Examiner

Man Phan

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 30 November 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10, 11, 14, 20, 25-28, 34, 35, 38, 57, 58, 61 and 67 is/are rejected.
- 7) ☒ Claim(s) 5-9, 12-13, 15-16-19, 21-24, 29-33, 36-37, 39-48, 53-56, 59-60, 62-66, 68-71 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

MAN U. PHAN
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2, 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The application of Gawargy et al. for a "Session initiation protocol based advanced intelligent network/intelligent network messaging" filed 11/30/2000 has been examined.

Claims 1-71 are pending in the application.

Claim Objections

2. Claims 5-7, 25, 29-31, 49, 53-54 are objected to because of the following informalities:

The claim contains the phrase "adapted to". It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-4, 25-28 and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kreppel (US#6,574,201) in view of Forslow (US#6,608,832).

With respect to claims 49-52, Kreppel (US#6,574,201) and Forslow (US#6,608,832) disclose a novel method and system for telephony services deployed in a broadband packet network, according to the essential features of the claims. Kreppel discloses in Figs. 1 & 3 a block diagram and flow chart illustrated the network architecture of a mobile radio telephone network for handling the packet data service via intelligent network, in which the transmission of packet data to and from a communication terminal of a subscriber of the mobile radio telephone network, comprising the steps of connecting via an interface, a service network node of the mobile telephone network to an access node interconnected to a packet data network; incorporating a service switching function of the intelligent network in the service network node of the mobile radio telephone network; and connecting a service control function of the intelligent network to the service network node (Col. 1, lines 64 plus and Col. 9, lines 33 plus).

However, Krepple does not disclose expressly the step of providing encapsulating at least a functional content of a transaction message in a PDU of the broadband packet network. In the same field of endeavor, Forslow (US#6,608,832) teaches in Fig. 2 a more detailed diagram showing a GSM mobile communication system including a General Packet Radio Service (GPRS) data network, in which within the GPRS network 51, packets or protocol data units (PDUs) are encapsulated at an originating GPRS support node and decapsulated at the destination GPRS support node. This encapsulation/ decapsulation at the IP level between the SGSN 50 and the GGSN 54 is called "tunneling" in GPRS. The GGSN 54 maintains routing information used to "tunnel" PDUs to the SGSN 50 currently serving the mobile station. A common GPRS Tunnel Protocol (GTP) enables different underlying packet data protocols to be employed even if those protocols are not supported by all of the SGSNs. All GPRS user-related data needed by the SGSN to perform routing and data transfer functions is accessed from the HLR 42 via the SS7 network 40. The HLR 42 stores routing information and maps the IMSI to one or more packet data protocol (PDP) addresses as well as mapping each PDP address to one or more GGSNs (Col. 3, lines 35 plus).

Forslow further discloses in Fig. 3 illustrated example data communication protocols employed between different nodes in the packet-switched, GPRS data communications network in GSM, in which a GPRS "transmission plane" is modeled with multi-layer protocol stacks. Between the GGSN and the SGSN, the GPRS tunneling protocol (GTP) tunnels the PDUs through the GPRS backbone network 52 by adding routing information to encapsulate PDUs (*encapsulating the functional content of a transaction message in PDUs*). The GTP header contains a tunnel end point identifier (TID) for point-to-point and multicast

packets as well as a group identity (GID) for point-to-multipoint packets. Additionally, a type field that specifies the PDU type and a quality of service profile associated with a PDP context session is included. Below the GTP, the well-known Transmission Control Protocol/User Datagram Protocol (TCP/UDP) and Internet Protocol (IP) are used as the GPRS backbone network layer protocols. Ethernet, frame relay (FR), or asynchronous transfer mode (ATM)-based protocols may be used for the link and physical layers depending on the operator's network architecture (Col. 4; lines 9 plus).

Regarding claims 1-4 and 25-28, they are method and system claims corresponding to the apparatus claims 49-52 above. Therefore, claims 1-4 and 25-28 are analyzed and rejected as previously discussed with respect to claims 49-52.

One skilled in the art would have recognized the need for effectively and efficiently distributing transaction oriented telephony functionality in a broadband packet network utilizing INAP and TCAP protocols, and would have applied Forslow's teaching of the "tunneling" in General Packet radio Service (GPRS) incorporated into existing circuit switched network into Kreppel's novel use of the mobile radio telephone network for handling the packet data service via IN architecture. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Forslow's common access between a mobile communications network and an external network with selectable packet-switched and circuit switched services into Kreppel's method and mobile radio telephone network for handling a packet data service with the

motivation being to provide a method and system for enabling IN/AIN functionality for telephony services deployed in a broadband packet network.

6. Claims 57-58, 61, 67 and 34-35, 38 and 10-11, 14, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kreppel (US#6,574,201) in view of Forslow (US#6,608,832) as applied to the claims above, and further in view of Douglas et al. (US#6,363,424).

With respect to claims 57-58, 61, 67, these claims differ from the claims above in that the claims require the mapping transaction message onto the PDU, mapping an encoded message payload into a payload of the PDU, and wherein the transaction message is an INAP message. In the same field of endeavor, Douglas et al. (US#6,363,424) discloses an IN services to IP end-point subscribers, in which call model state machine utilizing state-level map between states in the IN call model and the corresponding states in the base call model. Douglas's invention thus also contemplates interfacing other base protocols such as Session Initiation Protocol (SIP) with other service protocols such as Transaction Capabilities Application Part (TCAP) or Intelligent Network Application Part (INAP), and variations thereof (See Fig. 1; Col. 2, lines 13 plus; Col. 4, lines 58 plus). An SCP simulator was programmed to receive requests from IP end-points encoded in the TCAP/IP format. All requests received are processed appropriately and a TCAP/IP response generated. This response is routed back to the client (soft SSP) that originated the request. Reuse of existing service logic on the SCP requires a careful encoding of service requests at the SSP end to

conform to established guidelines so that the SCP may process the requests it receives, and generate the appropriate responses (Col. 13, lines 50 plus).

Regarding claims 10-11, 14, 20 and 34-35, 38, they are method and system claims corresponding to the apparatus claims 57-58, 61, 67 above. Therefore, claims 10-11, 14, 20 and 34-35, 38 are analyzed and rejected as previously discussed with respect to claims 57-58, 61, 67.

One skilled in the art would have recognized the need for effectively and efficiently distributing transaction oriented telephony functionality in a broadband packet network utilizing INAP and TCAP protocols, and would have applied Douglas's teaching of the SIP interfacing with other service protocols such as TCP/INAP protocols and Forslow's teaching of the "tunneling" in General Packet radio Service (GPRS) incorporated into existing circuit switched network into Kreppel's novel use of the mobile radio telephone network for handling the packet data service via IN architecture. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Douglas' reuse of services between different domains using state machine mapping techniques, and Forslow's common access between a mobile communications network and an external network with selectable packet-switched and circuit switched services into Kreppel's method and mobile radio telephone network for handling a packet data service with the motivation being to provide a method and system for enabling IN/AIN functionality for telephony services deployed in a broadband packet network.

Allowable Subject Matter

7. Claims 5-9, 12-13, 15-16-19, 21-24 and 29-33, 36-37, 39-48 and 53-56, 59-60, 62-66, 68-71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for the indication of allowable subject matter: The closest prior art of record fails to disclose or suggest wherein the node comprises either one of a media gateway controller adapted to enable telephony signal traffic through the broadband packet network, and an application server adapted to invoke IN/AIN functionality using TCAP functional content; a CCS network element adapted to send and receive PDU's of the broadband packet network; and a network element of the broadband packet network; means for formulating a transaction message and means for inserting the formulated transaction message into a payload portion of the PDU, as recited in the claims. The prior art of record also fails to disclose or suggest wherein the means for mapping comprises means for mapping a TCAP/INAP message type onto a respective message type of the PDU, mapping a transaction message parameter onto a respective PDU message parameter; and wherein the encoded message payload is mapped into a payload portion of a MIME part of the PDU, as specifically recited in the claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Yoakum et al. (US#6,735,621) is cited to show the method and apparatus for messaging between disparate networks.

The Githo et al. (US#6,625,141) is cited to show the system and method for providing value-added services (VAS) in an integrated telecommunications network using SIP.

The Chen et al. (US 2002/0090940) is cited to show the IP UTRAN

The Ong et al. (US#6,795,430) is cited to show the service-related signaling between voice over IP services.

The Su et al. (US#6,693,898) is cited to show the call control model for a packet-based intelligent telecommunications network.

The Weisser Jr. (US#5,701,301) is cited to show the mediation of open advanced intelligent network in SS7 protocol open access environment.

The Hurtt et al. (US 2004/0017798) is cited to show the system and method for providing a connection in a communication network.

The Itzkovitz et al. (US 2003/0165135) is cited to show the interface for intelligent network services.

The Ward et al. (US#6,055,232) is cited to show the telecommunications network architecture deploying intelligent network services in a legacy network.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (571) 272-3149.

The examiner can normally be reached on Mon - Fri from 6:30 to 3:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

10. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 305-9051, (for formal communications intended for entry)

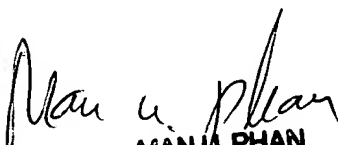
Or: (703) 305-3988 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Mphan

09/27/2004.


MAN U. PHAN
PRIMARY EXAMINER